

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021031**Date Inspected:** 27-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhou Zhong Hai**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG COMPONENT**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Subhasis Bera was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

In process Inspection

Trial Assembly

This QA Inspector observed the following work in progress:

SMAW in the 4G position for the OBG Segment 12BW to 12CW ,UT repair weld No. CA3012-011. The welder is identified as #046709. ZPMC QC is identified as Mr. Zhou Peng. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-REPAIR-FCM-1. The weld repair report is identified as CWR2763. The welding variables were recorded at, Amperage 152, volts 24.The In-process SMAW appears to be progressing in compliance with approved contract documents.

SMAW in the 1G position for the OBG Segment 12BW to 12CW ,UT repair weld No. OBW12A-002. The welder is identified as #040611. ZPMC QC is identified as Mr.Zhou Zhong Hai. The welding variables recorded by QC appear to comply with WPS-345-SMAW-1G(1F)-REPAIR-FCM-1.The weld repair report is identified as WR20315. The welding variables were recorded at, Amperage 176, volts 23.4.The In-process SMAW appears to be progressing in compliance with approved contract documents.

SMAW in the 4G position for the OBG Segment 12BE to 12CE, UT repair weld No. OBE12E-003. The welder is

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identified as #067752. ZPMC QC is identified as Mr. Wang Li Yang. The welding variables recorded by QC appear to comply with WPS-345-SMAW-4G(4F)-FCM-REPAIR-1. The weld repair report is identified as CWR2812 R1. The welding variables were recorded at, Amperage 154, volts 24.5. The In-process SMAW appears to be progressing in compliance with approved contract documents.

CWR verifications (CWR2811R1)

Type – (D-scan)

This QA Inspector was notified via email for verification of B – CWR2811 R1 at 1030 hours the following was observed:

- The component for verification was identified as OBE12C-001 (12BE to 12CE Bottom panel field splice weld @ D6)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-1G(1F)-FCM-Repair-1, WPS-345-SMAW-4G(4F)-FCM-Repair-1

CWR verifications (CWR2813 R1)

Type – (D-scan)

This QA Inspector was notified via email for verification of B–CWR2813 R1 at 1030 hours the following was observed:

- The component for verification was identified as OBE12A-003 (12BE to 12CE Deck panel to Deck panel splice weld @A1)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-1G(1F)-FCM-Repair-1, WPS-345-SMAW-4G(4F)-FCM-Repair-1

CWR verifications (CWR2829R0)

Type – (D-scan)

This QA Inspector was notified via email for verification of B–CWR2829 R0 at 1030 hours the following was observed:

- The component for verification was identified as CA3012-001,OBW12E-001 (12BW to 12CW Edge panel to Side panel corner weld @ C4&C5)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Zhou Zhong Hai was present on site to direct and record all repair work.
- WPS to be used for repair were WPS-345-SMAW-3G(3F)-FCM-Repair-1, WPS-345-SMAW-4G(4F)-FCM-Repair-1

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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ZPMC performing Carbon Arc Back Gouging for UT repair splice weld joint joining between deck plate to deck plate at Segment 12BW to 12CW



02/27/2011 13:51

ZPMC personnel performing SMAW for UT repair splice weld joint OBW12A-002 at 1G position on Deck plate of segment 12BW to 12CW at Trial Assembly area



02/27/2011 13:31

Summary of Conversations:

No relevant conversations

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Bera,Subhasis

Quality Assurance Inspector

Reviewed By: Dsouza,Christopher

QA Reviewer